Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (cancelled)

3. (currently amended) The composition of claim 4 wherein a mole fraction of equivalents of silicone hydrogen bond (Si-H) provided by the hydrogen terminated silicone oil to a total equivalents of Si-H provided by both the silicone crosslinker and the hydrogen terminated silicone oil is at least 0.4.

4. (currently amended) A composition comprising:

at least one vinyl-terminated silicone oil;

at least one conductive filler;

at least one hydrogen terminated silicone oil; and

at least one silicone crosslinker to form a gel thermal interface material with low modulus, the silicone crosslinker is a ~~random~~ co-polymer comprising ~~at least three~~ a plurality of silicone-hydrogen bonds (Si-H), the composition being a curable and thermally conductive material.

5. (previously presented) The composition of claim 4 wherein a molar ratio of Si-H equivalents to Si-vinyl equivalents is in a range of approximately 2 to 0.6.

6. (original) The composition of claim 5 wherein the ratio is approximately 1.

7. (previously presented) The composition of claim 4 wherein the conductive filler is one of aluminum, silver, copper, aluminum nitride, aluminum oxide, zinc oxide, boron nitride, aluminum nitride, silver coated copper, silver coated aluminum, and carbon fibers, and alloys and mixture thereof.

8. (previously presented) The composition of claim 4 wherein the conductive filler has a particle size of less than 300 microns.

9. (cancelled)

10. (previously presented) A composition comprising:

at least one vinyl-terminated silicone oil;

at least one conductive filler;

at least one hydrogen terminated silicone oil;

at least one catalyst for curing reaction; and

at least one coupling agent for the filler, the composition being a curable and thermally conductive material.

11. (previously presented) A composition comprising:

at least one vinyl-terminated silicone oil;

at least one conductive filler;

at least one hydrogen terminated silicone oil;

at least one catalyst for curing reaction; and

at least one adhesion promoter, the composition being a curable and thermally conductive material.

12-13. (cancelled)

14. (currently amended) The method of claim 15 wherein a mole fraction of equivalents of silicone hydrogen bond (Si-H) provided by the hydrogen terminated silicone oil to a total equivalents of Si-H provided by both the silicone crosslinker and the hydrogen terminated silicone oil is at least 0.4.

15. (currently amended) A method comprising:

combining at least one vinyl-terminated silicone oil, at least one conductive filler, and at least one hydrogen terminated silicone oil to form a curable thermal interface material (TIM); and

combining a silicone crosslinker to form a gel thermal interface material with low modulus, the silicone crosslinker is a random co-polymer comprising a plurality of ~~at least three~~ silicone-hydrogen bonds (Si-H).

16. (previously presented) The method of claim 15 wherein a molar ratio of equivalents silicone-hydrogen bonds (Si-H) to equivalents of silicon-vinyl bonds (Si-vinyl) is in a range of approximately 2 to 0.6.

17. (previously presented) The method of claim 15 wherein the ratio is approximately 1.0.

18. (previously presented) The method of claim 15 wherein the conductive filler is one of aluminum, silver, copper, aluminum nitride, aluminum oxide, zinc oxide, boron nitride, aluminum nitride, silver coated copper, silver coated aluminum, carbon fibers, alloys and mixtures thereof.

19. (previously presented) The method of claim 15 further comprising combining at least one catalyst for curing reaction.

20. (original) The method of claim 19 further comprising combining at least one coupling agent for the filler.

21. (original) The method of claim 19 further comprising combining at least one adhesion promoter.

22. (cancelled)

23. (previously presented) The processor assembly of claim 28 further comprising:

a substrate coupled to the semiconductor device; and

an interposer coupled to the substrate.

24. (original) The processor assembly of claim 23 further comprising:

a first plurality of solder bumps coupling the substrate to the semiconductor device; and

a second plurality of solder bumps coupling the semiconductor device to the substrate.

25. (original) The processor assembly of claim 23 further comprising:

a plurality of pins extending outwardly from the interposer.

26. (cancelled)

27. (previously presented) The processor assembly of claim 28 wherein a mole fraction of equivalents of silicone hydrogen bond (Si-H) provided by the hydrogen terminated silicone oil to a total equivalents of Si-H provided by both the silicone crosslinker and the hydrogen terminated silicone oil is at least 0.4.

28. (currently amended) A processor assembly comprising:

a semiconductor device;

a heat spreader coupled to the semiconductor device;

a first curable thermal material between the semiconductor device and the heat spreader to provide thermal resistance, the first curable thermal material comprising:

at least one vinyl-terminated silicone oil,

at least one conductive filler, and

at least one hydrogen terminated silicone oil,

a thermal element coupled to the heat spreader; and

a second curable thermal material between the heat spreader and the thermal element, the second curable thermal material comprising:

at least one vinyl-terminated silicone oil,

at least one conductive filler, and

at least one hydrogen terminated silicone oil,

the first and second curable material further comprises at least one silicone crosslinker to form a gel thermal interface with low modulus, the silicone crosslinker is a random co-polymer comprising ~~at least three~~a plurality of silicone-hydrogen bonds (Si-H).

29. (previously presented) The processor assembly of claim 28 wherein a molar ratio of Si-H equivalents to Si-vinyl equivalents is in a range of approximately 2 to 0.6.

30. (previously presented) The processor assembly of claim 28 further comprising:
a substrate coupled to the semiconductor device; and
a plurality of pins extending outwardly from the substrate.

31. (new) The composition of claim 4, wherein the plurality of silicone-hydrogen bonds (Si-H) of the silicone crosslinker comprises at least three silicone-hydrogen bonds (Si-H).

32. (new) The method of claim 15, wherein the plurality of silicone-hydrogen bonds (Si-H) of the silicone crosslinker comprises at least three silicone-hydrogen bonds (Si-H).

33. (new) The processor assembly of claim 28, wherein the plurality of silicone-hydrogen bonds (Si-H) of the silicone crosslinker comprises at least three silicone-hydrogen bonds (Si-H).